### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization

International Bureau



# 

(43) International Publication Date 19 February 2004 (19.02.2004)

(10) International Publication Number WO 2004/015276 A1

(51) International Patent Classification7: 29/44, 29/42, 29/52, 29/66, 29/54

F04D 29/46.

(21) International Application Number:

PCT/GB2002/003779

- (22) International Filing Date: 13 August 2002 (13.08.2002)
- (25) Filing Language:

English

(26) Publication Language:

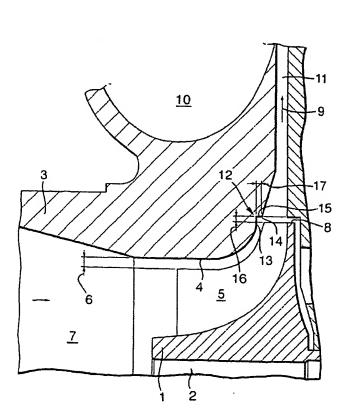
English

- (71) Applicant (for all designated States except US): HONEY-WELL INTERNATIONAL, INC. [US/US]; 101 Columbia Road AB-2B, P.O. Box 2245, Morristown, NJ 07962 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): CHEN, Hua [GB/GB]; 14 SouthCliffe, Great Hardwood, Lancashire BB6 7PP

- (74) Agent: FREEMAN, Jacqueline, Carol; W.P. Thompson & Co., 55 Drury Lane, London WC2B 5SQ (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  $\mathsf{MX}, \mathsf{MZ}, \mathsf{NO}, \mathsf{NZ}, \mathsf{OM}, \mathsf{PH}, \mathsf{PL}, \mathsf{PT}, \mathsf{RO}, \mathsf{RU}, \mathsf{SD}, \mathsf{SE}, \mathsf{SG},$ SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: COMPRESSOR



(57) Abstract: compressor for a turbocharger comprising: compressor wheel having compressor blades being mounted for rotation on a shaft a shroud mounted adjacent the wheel and defining a gas flow path between the shroud and the blades from a compressor inlet to a diffuser outlet; wherein in cross-section the shroud has a surface in the flow path with a profile which includes a section with a smoothly curving surface with a smoothly curving surface and at least one relative discontinuity.

## WO 2004/015276 A1



#### Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.